BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 92-319-E - ORDER NO. 92-801 SEPTEMBER 14, 1992

IN	RE:	Garry L. Brooks, Brooks International, Inc., Complainant,)) ORDER DISMISSING) COMPLAINT)
		vs.)
		Duke Power Company,)
		Respondent.)
)

This matter comes before the Public Service Commission of South Carolina (the Commission) by way of a Complaint filed on June 3, 1992, by Garry L. Brooks, Brooks International, Inc. (the Complainant) for a hearing concerning his complaint against Duke Power Company (the Respondent) regarding power disturbances at Brooks International, Inc. The request for the hearing came after an informal proceeding where Commission Staff, Mr. Brooks, and the Company worked to attempt to resolve the problem.

A hearing was duly held at 11:00 a.m. on September 1, 1992, the Honorable Henry G. Yonce, presiding. Garry L. Brooks appeared pro se; Duke Power Company was represented by William Larry Porter, Esquire, and Karol P. Mack, Esquire; and the Commission Staff was represented by Marsha A. Ward, General Counsel.

The Commission heard testimony from Garry L. Brooks, Ruth W. Brooks, and Karen R. Turner, on behalf of the Complainant. Leroy S. Taylor, Jr., Jack Robinson, and William A. Lowder gave testimony in support of Duke Power Company's position.

Based on the testimony and evidence presented at the hearing, the Commission makes the following findings of fact and conclusions of law:

FINDINGS OF FACT AND CONCLUSIONS OF LAW

- Garry L. Brooks is the President of Brooks
 International, Inc. which is a texturing mill located in Chester,
 South Carolina.
- 2. Brooks International produces yarns used in medical bandages and elastic. According to Mr. Brooks, the equipment used to conduct this process is very susceptible to electrical problems.
- 3. Mr. Brooks had been in contact with Duke Power Company regarding the start-up of his mill since August 1990.
- 4. Brooks International began training its operators in December of 1990 and started production in January of 1991.
- 5. According to Mr. Brooks, from the time he started his mill, he encountered problems with getting initial service from Duke Power, and then later experienced blips, power sags, or power outages occurring on a continuous basis until July 31, 1991.
- 6. According to Mr. Brooks, the plant experienced many power outages during the January 1991 through June 1991 time period but since July 31, 1991, Brooks International has not had

the first power failure of any kind.

- 7. Mr. Brooks stated that the reason he wanted to have this proceeding was that he wanted to have an explanation as to what the Company did as of July 31, 1991, to correct his power problems. Mr. Brooks questioned why his power outage problems were not rectified during the first 6 months of his operations.
- 8. The testimony of Mr. Lowder, Customer Service Manager of Duke Power Company, is enlightening in regard to the efforts put forth by Duke Power Company to address the power problems experienced by Mr. Brooks and his Company, Brooks International.
- a. In August 1990, Mr. Brooks contacted Duke for information about his business that he was considering. He requested an estimated bill based on 180KW demand. According to Mr. Brooks, this information was to be presented to the Regional Planning Commission.
- b. According to Mr. Lowder, Mr. Brooks did not request that Duke Power make any changes in the service when he contacted Duke in August of 1990. Additionally, Mr. Brooks did not indicate when he might need changes to his service.
- Company to request a change of service immediately. Mr. Brooks contended that Duke Power had known about his need for service for three months. Duke's records did not show that Mr. Brooks had contacted Duke Power about his needs for a change in service prior to November 15, 1990. Mr. Brooks had not wired the building at that time, and Duke Power assisted him in contacting a commercial

electrician.

- d. By November 21, 1991, Duke Power had completed its engineering and construction work to give Brooks International's new yarn operation service. The Company had to wait seven days for Mr. Brooks to complete his internal wiring before the service could be energized and the meter set.
- e. Additionally, Duke Power installed a new 200 amp, 480/277 volt, three-phase service to the second building. Duke installed a transformer on a pole on Center Street and provided the service with overhead conductors.
- f. Less than two months later, Mr. Brooks informed Duke Power Company that he was adding a 100 horsepower air compressor. The Company had no prior knowledge of this additional load when the three-phase service was installed in November of 1990. By January 17, 1991 Duke had engineered and constructed the necessary service upgrades to accommodate the new load.
- g. According to Mr. Lowder, in March of 1991, Mr. Brooks contacted Duke about increasing his load for three additional knitting machines, an additional 100 horsepower air compressor, and a 20 ton air conditioning unit. After choosing an option provided by Duke Power Company, Mr. Brooks consolidated the two existing overhead single phase services and increased the capacity of the three-phase service that Duke had just reworked three months earlier. The agreement called for underground cables to be placed in conduit under the paved alley running near the Brooks' operation to increase reliability to Brooks International and

decrease the possible outage time should an underground cable need repair or replacement. This also required Mr. Brooks to build a pit pad cement structure on which to install the transformer and where all primary and secondary level voltage cable would be terminated.

- h. Mr. Brooks called Mr. Lowder on April 28 and advised him that he could not pay the \$1400 to \$1600 dollars required for the pit pad and asked for alternatives. A less expensive pad for the transformer was agreed upon, but it required Duke Power to direct bury its underground cable rather than install it in conduit. An additional run of cable was placed in the same ditch in the event one of the direct buried primary cables faulted and had to be repaired. Duke did not charge Mr. Brooks for this additional cable. The underground cable installation began on April 30 and the transformer installation and all connection work was completed on May 8, 1991.
- i. According to Mr. Lowder, his first contact with Mr. Brooks concerning power outages was on April 8, 1991. Mr. Lowder was shown a list of power disturbances by Mr. Brooks experienced by Brooks International since January, 1991.
- j. Mr. Lowder asked Mr. Brooks to call him immediately each time his machines shutdown. Mr. Brooks agreed to do this and to keep a list of all dates and times so that Duke could correspond the outages to the line disturbances as they occurred.
- k. Brooks International is served by Duke's Chester main circuit 12-03. The Company performed tree cutting along the

right-of-way on that circuit and did a pole-by-pole check for animal protection installation and checked all lightning protection and increased such if necessary.

- 1. Mr. Brooks continued to have disturbances for which Duke Power could not locate a cause.
- m. At that time Duke Power consulted with Mr. Leroy S.

 Taylor, Jr., its System Disturbance Specialist. Mr. Taylor

 recommended that the Company install a Dranetz disturbance analyzer

 to help the Company understand what Mr. Brooks was experiencing.

 The Dranetz was installed on July 9, 1991.
- n. The Dranetz allowed Duke to continuously monitor the power coming into Brooks' plant. Based on the analysis of the data, it appeared that Brook's equipment was sensitive enough to see voltage sags caused by the other circuits when they experienced a disturbance.
- o. Upon realizing that the other circuits would cause a disturbance to the circuit that Brooks was served from, Duke initiated the same effort on tree trimming, animal protection, and lightning protection for the other three circuits out of the Chester main substation. This information was shared with Mr. Brooks in a meeting in his home on July 31, 1991.
- p. From that time forward, Brooks International has not had any disturbances in its electric service. Duke's efforts related to trimming of trees, adding animal guards and other protection which reduced disturbances to the circuits. Duke Power has expended over \$30,000 on material and labor to improve its level of

service given to Brooks International. As a result, the Chester main circuits rank at the top for reliability on the Duke Power system.

q. The Commission concludes that Duke Power Company has explained how service has improved to Brooks International. The Commission also concludes that Duke Power Company acted diligently in its efforts to respond to its customer's problems. It is obvious that the Company's efforts in tree trimming, animal protection, and other protections have alleviated to a large extent the power sags experienced by the sensitive equipment used at Brooks International. It also appears to the Commission that there may have been some communication problems between Mr. Brooks and Duke Power Company employees, but that Duke Power has acted in a diligent manner to address the concerns of its customer Brooks

DOCKET NO. 92-319-E - ORDER NO. 92-801 SEPTEMBER 14, 1992 PAGE 8

International, Inc. Therefore, because the Company has adequately responded to the service concerns of Brooks International, Inc., the Commission finds that the Complaint of Brooks International, Inc. and Garry L. Brooks should be and hereby is dismissed.

IT IS SO ORDERED.

BY ORDER OF THE COMMISSION:

thairman

ATTEST:

Executive Director

(SEAL)